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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/553,053	04/20/2000	Koji Shibata	81NP/44849CO	5850

7590 10/03/2003

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EXAMINER

EVANS, ROBIN OCTAVIA

ART UNIT	PAPER NUMBER
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3752

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/553,053

Applicant(s)

SHIBATA ET AL.

Examiner

Robin O. Evans

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-13 and 16 is/are pending in the application.
- 4a) Of the above claim(s) 3-6,11-13 and 16 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 and 9 is/are allowed.
- 6) ☒ Claim(s) 7,8 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 289. 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Claims 3-6, 11-13 and 16 withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention and species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 6.
2. Applicant's election with traverse of invention I: claims 1, 7-13 and 16 and Species of Figure 2: claims 1 and 7-10 readable thereon in Paper No. 6 is acknowledged. The traversal is on the ground(s) that the combination does not require the particulars of the subcombination has not been demonstrated. This is not found persuasive because the restriction stated that the combination does not require a fuel injector where the fuel spray has a deflected side longer than another side as required by the subcombination. The subcombination must have a fuel spray in which "a reachable distance of said fuel spray at a deflected side is longer and a reachable distance of said fuel spray at another side opposite to a deflected side is shorter" this limitation is not required by the combination and therefore the restriction is deemed proper.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 8 recites "a top face of said small raised part", however claim 7 already recites a top face. It is unclear if the top face recited in claim 8 is a double inclusion of elements or if there is another face on the small raised part. Clarification is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 7, 8 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Naitoh.

In figure 18, Naitoh shows a fuel injection valve having a valve body 12, fuel swirling means 38, injection port 40, slanted face 502, longitudinal axis Y of the fuel injection valve, small raised portion 44 and a nozzle 18 oriented such that a fuel spray is deflected.

7. Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Foreign patent No. 7-119584 (Hereinafter Toshiaki).

Toshiaki shows a fuel injection valve having a fuel swirling means 5, valve seat 6, valve body 3 and nozzle 8. Also Note figure 2, which shows the outlet of the injection port slanted.

Allowable Subject Matter

8. Claims 1 and 9 are allowed over the prior art of record.

Conclusion

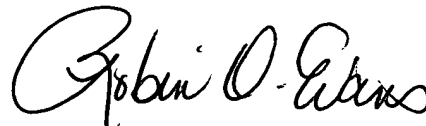
9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Miyajima et al., and Shibata et al. show fuel injection valves in the general state of the art of the invention.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robin O. Evans whose telephone number is (703) 305-5766. The examiner can normally be reached on Monday-Thursday, 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mar can be reached on (703) 308-2087. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.



Robin O. Evans
Primary Examiner
Art Unit 3752

9/28/03

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